

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
9 June 2005 (09.06.2005)

PCT

(10) International Publication Number
WO 2005/052681 A2

(51) International Patent Classification⁷: G02F 1/225 (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number: PCT/GB2004/004515

(22) International Filing Date: 27 October 2004 (27.10.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 0325095.8 28 October 2003 (28.10.2003) GB

(71) Applicant (for all designated States except US): FIL-TRONIC PLC [GB/GB]; The Waterfront, Salts Mill Road, Saltaire, Shipley BD18 3TT (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): KUVER, Atul [AU/GB]; 3 Clowbeck Court, Darlington DL3 0BQ (GB). ZHOU, Yi [CN/GB]; 72 Neville Road, Darlington DL3 8NE (GB).

(74) Agent: McDONOUGH, Johnathan; Urquhart-Dykes & Lord LLP, Tower North Central, Merrion Way, Leeds LS2 8PA (GB).

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

LE

WO 2005/052681 A2

(54) Title: A COPLANAR WAVEGUIDE LINE

(57) Abstract: A coplanar waveguide line comprising a substrate; a central electrode strip on the substrate; first and second electrode strips disposed on opposite sides of the central electrode strip and extending parallel thereto; first and second optical waveguides on the substrate, the optical waveguides being positioned between the first and central electrode strips and extending parallel thereto; the central electrode comprising at least one T-rail extending proximate to the first optical waveguide; the first electrode comprising at least one T-rail extending proximate to the second optical waveguide; the substrate comprising an n⁺ electrically conducting layer extending between the optical waveguides; wherein the coplanar waveguide line further comprises an electrical connection between first and second electrode strips.